RYOBI® OWNER'S OPERATING MANUAL

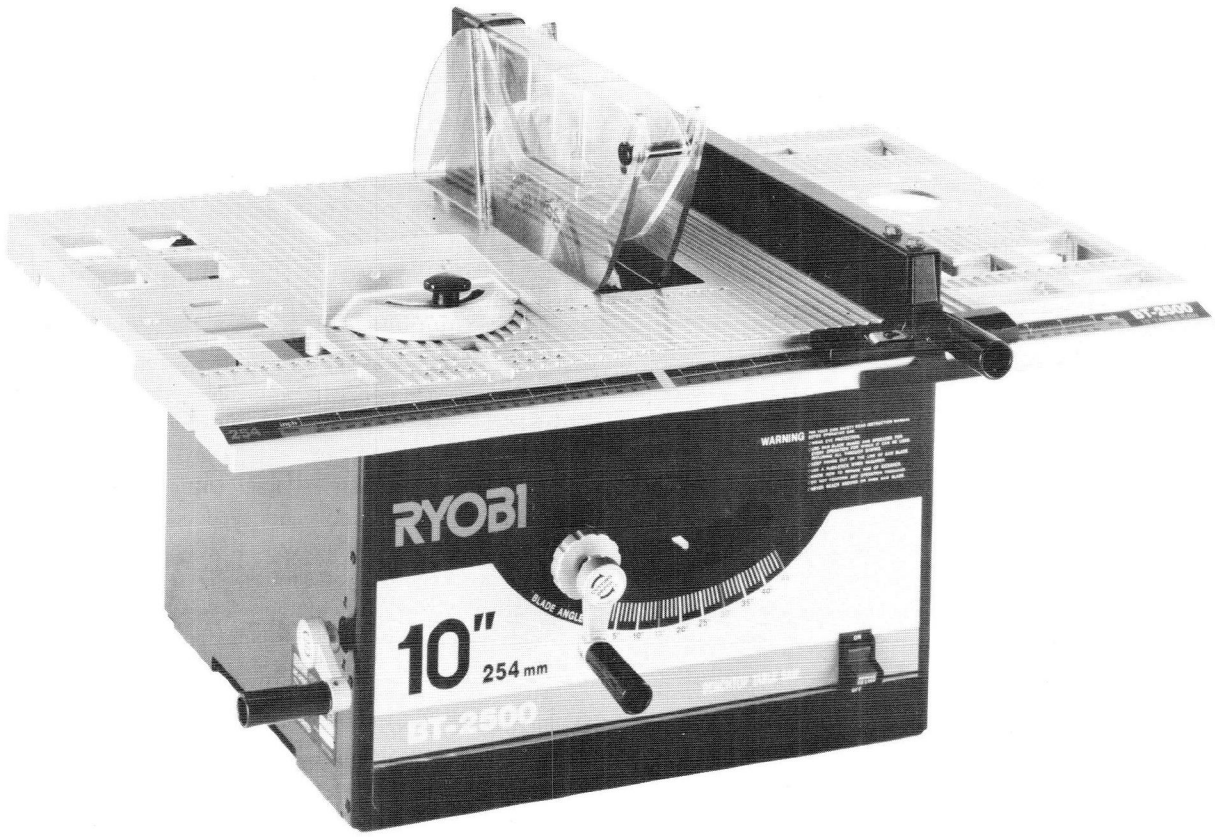
TABLE SAW / BT-2500

DOUBLE INSULATED

Kerf = 1/8"

スタンダード

6981757(C)Ⓐ



■SPECIFICATIONS

Blade size	254mm (10")
Depth of cut at 90 deg.	90 mm
at 45 deg.	63 mm
Table dimensions	700×480×300 mm (27-9/16"×18-29/32"×11-13/16")
Input	1,500 watt
No load speed	4,500 r.p.m.
Net weight	18 kg (39.6 lbs.)

■CAUTION!!!

READ YOUR OWNER'S MANUAL THROUGH COMPLETELY AND CAREFULLY BEFORE ATTEMPTING TO SET-UP OR OPERATE YOUR NEW TABLE SAW. SEE INSIDE COVER FOR SAFETY RULES.

NOTICE: ON THE FACE PLATE OF YOUR TABLE SAW YOU WILL FIND THE MODEL AND SERIAL NUMBER OF YOUR UNIT. RECORD THESE NUMBERS IN THE SPACES PROVIDED BELOW AND RETAIN FOR YOUR RECORDS.

SAFETY RULES

Every good craftsman respects the tools with which he works. He knows they represent years of constantly improved design. He also knows that they are dangerous if misused.

Know your power tool. Read the owner's guide carefully. Learn its applications and limitations, as well as the specific potential hazards peculiar to this tool.

WARNING: DO NOT CONNECT POWER CORD UNTIL THE FOLLOWING STEPS HAVE BEEN SATISFACTORILY COMPLETED.

A. Assembly and installation.
B. Examination and operating familiarity with ON-OFF switch, elevation control, bevel index and lock, and anti-kickback device.
C. Review and understand the Safety Instructions and Operating Procedures which follow.

WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following.

SAFETY FIRST—Read all instructions thoroughly and learn the applications, operating limitations and potential hazards of this tool before attempting to operate it.

1. KEEP GUARDS IN PLACE and in working order.
2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
3. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
4. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
5. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
6. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
7. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
8. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
9. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
10. DON'T OVERREACH. Keep proper footing and balance at all times.
11. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
12. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function-check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
13. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

FOR ALL DOUBLE—INSULATED TOOLS

1. This ttool is intended for residential use only.
2. When servicing use only identical replacement parts.

WARNING

For your own safety read instruction manual before operation saw.

1. Wear eye protection.
2. Use saw-blade guard and spreader for every operation for which it can be used, including all through sawing.
3. Keep hands out of the line of saw blade.
4. Use a push-stick when required.
5. Pay particular attention to instructions on reducing risk of kickback. (Or "Know how to reduce risk of kickback.")
6. Do not perform any operation freehand.
7. Never reach around or over saw blade. (Or "Never reach in back of or over saw blade.")

PERSONAL CLOTHING AND EQUIPMENT

1. Do not wear gloves while operating the saw. Loose flowing garments, jewelry (rings, wrist watches, etc.) and neckties must never be worn. Long sleeves must be rolled to above the elbows.
2. Always wear safety goggles, to protect the eyes. In addition, wear a face shield if the operation is dusty, and ear protectors (plugs or muffs) during extened periods of operation.
3. Never place your fingers or hands in the path of the saw blade. Always position the GUARD and the anti-kickback assembly for rip type operations. Also make sure the cutting tool, arbor collars and arbor nuts are installed properly. Keep guard in place.
4. Use only accessories that are designed for this machine. **USE THE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

   Do not use any blade or other cutting tool marked for an operating speed lower than 5000 RPM. Never use a cutting tool larger in diameter than for which the saw was designed.

   The use of abrasive or cut-off wheels, or wire wheels can be dangerous and is not recommended. (Abrasive or cut-off wheels are used to saw many different materials including metals, stone, and glass.)

   The saw blade. dado, or other cutting tool must be removed from the saw arbor before using a secondary accessory shaft (such as the rear end of the saw motor.)
5. A large proportion of saw accidents is caused by dull, badly set, improperly filed cutting tools, by gum or resin adhering to cutting tools, and by saw blade misalignment (out-of-parallel) with the fence. Such conditions cause the material to stick, jam, stall the saw, or kickback at the operator. NEVER ATTEMPT TO FREE A STALLED SAW BLADE WITHOUT FIRST TURNING THE SAW "OFF". If the sawblade is stalled or jammed, shut saw "OFF", remove workpiece, and check sawblade squareness to table surface and to the fence in cut-off position, and check for heel. Adjust as indicated. Avoid potential injury by proper cutting tool and machine maintenance.
6. CAUTION: DO NOT cycle the motor switch ON and OFF rapidly, as this might cause the saw blade to loosen. In the event this should ever occur, allow the saw blade to come to a complete stop, disconnect power and re-tighten the arbor nut normally, not excessively.
7. Never perform any operation "free hand". This term means feeding the workpiece into the saw blade or other cutting tool without using the fence or some other device which prevents rotation or twisting of the workpiece during the operation. Never "rip" (cut with the grain) narrow or long workpieces in the crosscut position.

   Provide proper support for the workpiece, based on its size and the type of operation to be performed. Hold the work firmly against the fence.

   When ripping short workpieces or narrow pieces use a push stick applied to the section of the workpiece between the blade and the

fence. (See Ripping Section of Operations.)

Avoid awkward hand positions, where a sudden slip could cause a hand to move into a saw blade or other cutting tool. Never reach in back of or around the cutting tool with either hand to hold down the workpiece, or for any other reason. Keep proper footing and balance, at all times..

CAUTION: Never reposition the Guard or antikickback with power ON. Make sure sure Guard is in place for all cutting operations. (Dado and moulding are the exception.)

8. Never use a length stop on the free end or edge of the workpiece whether crosscutting or ripping. Never hang onto or touch the free end of workpiece, or a free piece that is cut off, while power is "ON" and/or the saw blade is rotating. In short, to guard against kickbacks or other potential accidents, the cut-off piece in any thru-sawing operation must be confined — it must be allowed to move laterally.

   Do not leave a long board unsupported so the spring of the board causes it to shift on the table. A support should be used to catch the end of the board your are cutting.
9. Whenever you have a choice, use the "IN-RIP" (instead of "OUT-RIP") setup. This provides more space on the fence side of the blade in which to use a push stick.
10. Never climb on or near the saw when power is on. Never leave the saw with power on, or before the cutting tool has come to a complete stop. Lock the motor switch and put away the key when leaving the saw.
11. Do not position the arm so the operation you are performing permits the cutting tool to extend beyond the edges of the table.
12. Never turn your table saw "ON" before clearing the table or work surface of all objects (tools, scraps of wood, etc.) except the work-piece and related feed or support devices for the operation planned.
13. Objects can be thrown upward toward the operator by the back of the blade if proper operating procedures are not followed during cross-cut type operations. This usually occurs when a small loose piece of wood or other object contacts the rear of the revolving blade and ricochets off the fence or the wall behind the saw toward the operator. It can be avoided by removing all loose pieces from the table immediately after they are made, using a long stick, and keeping the guard, in place at all times.
14. NEVER gang crosscut — lining up more than one workpiece in front of the fence and then pulling saw thru — the blade could pick up one or more pieces and cause a binding or loss of control and possible injury.

    Safety is a combination of operator common sense and alertness at all times when the saw is being used.
15. **Disconnect saw** before servicing and when changing accessories such as blades, cutters.
16. **Avoid accidental starting.** Make sure switch is off before plugging in cord.
17. **KICKBACKS — THEIR CAUSE**

    Kickbacks can cause serious injury: A kickback occurs when a part of the workpiece binds between the saw blade and the rip fence or other fixed object, rises from the table, and is thrown toward the operator. Kickbacks are usually caused by one or more of the following conditions:

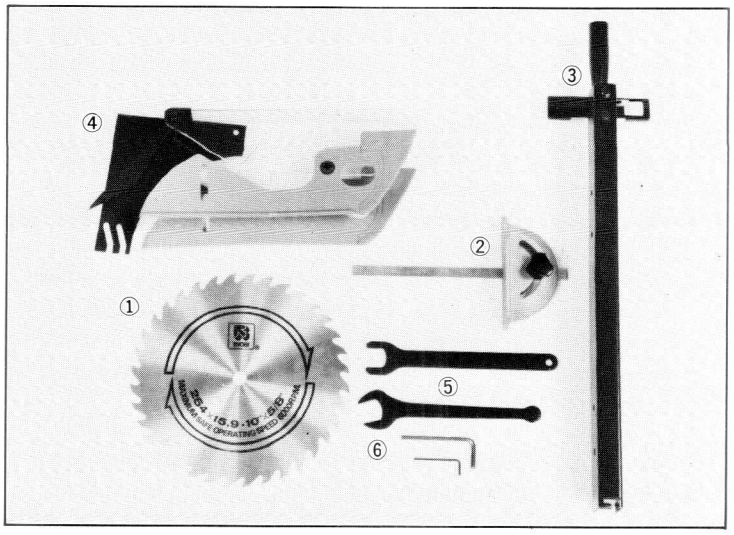
    A. Failure to determine that the saw blade is parallel to the rip fence.
    B. Confining the cut-off piece when ripping.
    C. Ripping wood that has a twisted grain, does not have a straight edge to guide along the fence, or wood that is twisted or not flat (which may rock on the table and pinch the blade).
    D. Improperly conditioned (dull) saw that permits the material to pinch on the out-feed edge of the saw and rise from the table.
    E. Ripping by applying the feed force to the section of the workpiece that will become the cut-off (free) piece (feed force when ripping should always be applied between the saw blade and the fence... use a push stick for narrow or short work).
    F. Releasing workpiece before operation is complete... not pushing the workpiece all the way past the saw blade.
    G. Failure to adjust the nose of the guard to just clear the workpiece.

    KICKBACKS — HOW TO AVOID THEM AND PROTECT YOURSELF FROM POSSIBLE INJURY.

    A. Avoiding any of the causes noted above.
    B. Keeping your face and body — and observers — always out of line of possible kickbacks.
    C. Always wear safety goggles.
    D. Making sure (by trial) before starting the cut that the anti-kick-back pawls will stop kickback once it has started.
    E. Whenever possible, perform rip and bevel rip with the saw in the in-rip position.
    F. Keeping points of anti-kickback pawls SHARP!
    G. Positioning nose of guard to just clear work and positioning anti-kickback pawls properly.
    H. Plastic and composition (like hardboard) materials may be cut on your saw. However, since these are usually quite hard and slippery, the anti-kickback pawls may not stop a kickback.
    I. When ripping 6mm or thinner materials follow all normal ripping procedures except set sawblade into table top at least 3mm. DO NOT let go of or stop feeding the workpiece between the blade and fence until you have pushed it completely past the anti-kick-back pawls. Otherwise the workpiece could get into the back of the saw blade and be thrown violently from the saw in the direction opposite to the feed direction. This is the same action that would occur if the instruction of the DANGER warning on the guard is aborted. Do not stand, or permit anyone else to stand, in line with the path of a piece that may be thrown from the saw in this manner.

UNPACKING

a. Open the box flaps and remove the top cardboard cover.
b. Remove the standard accessories that are packed on both sides of the box.
c. Then remove the rip fence and the miter gauge.
d. Finally remove the table saw from the box.
e. Laying the table saw upside down on table, remove the two pieces of cardboard from around the motor.



■STANDARD ACCESSORIES

①Combination saw blade, ②Miter gauge, ③Rip fence, ④Safety cover, ⑤Spanners, ⑥Hex. wrenches.

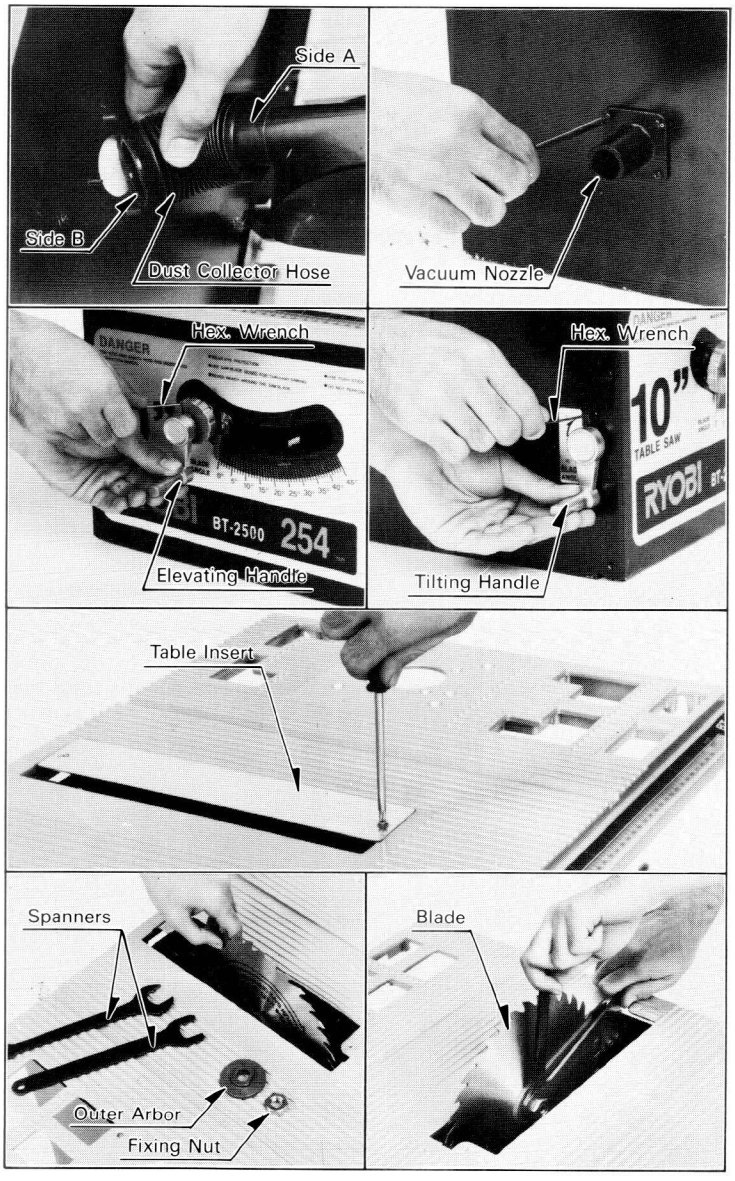
ASSEMBLY OF THE TABLE SAW

(Lay the table saw upside down on its table.)

1) Mount the dust collector hose and the vacuum hose connector bracket.
   a. Remove the four screws that are mounted around opening in the side saw for the vacuum hose connector bracket.
   b. Mount the side A of the hose on the dust collector nozzle and fit the side B of the hose through the opening in the side of the saw. Mount the vacuum nozzle over the side B of the hose and fix it with the four screws that were removed earlier.

2) Mount the Elevating and Lowering Handle.
   a. Mount the elevating handle on the shaft on the front of the saw and fix it by tightening the set screw in the handle.
   (Turn the table saw over so it is in its normal operation position.)

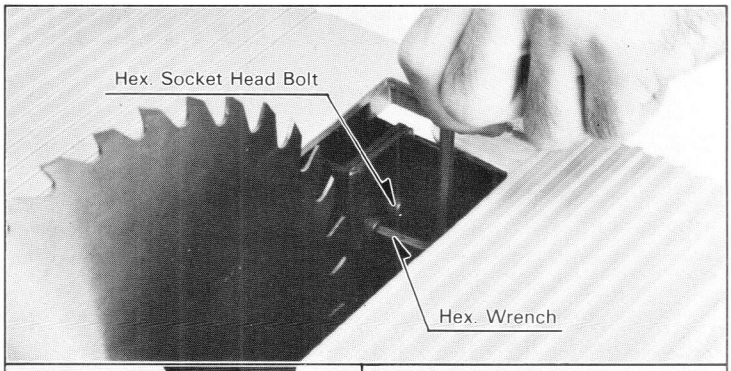
3) Mount the Blade
   a. Remove the table insert mounted on the side of the opening for the blade in the table by removing the two phillips flat head screws.
   b. After fully releasing the lock handle, turn the elevating handle in the clockwise direction to raise the blade shaft to its highest position. Remove the blade fixing nut and the outer arbor. Then mount the blade (Be sure that the teeth are facing the front side of the saw.) Fix the blade in place by using the fixing nut.

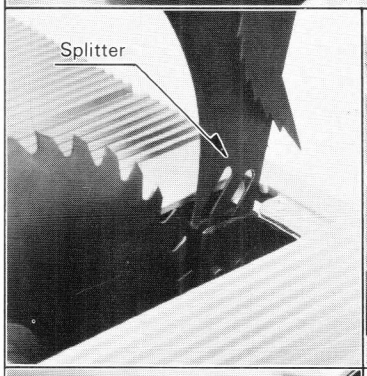


4) Mount the Blade Safety Cover

a. To mount the blade safety cover slightly loosen the two hexagon socket headed bolts that fix the bracket and the arm. Flip the left side (Standing at the back side of the saw) safety cover toward the front so it is easy to tighten the two hexagon socket headed bolts.

b. Insert the end of the splitter between the fixing bracket and the arm, so that the two long slots in the splitter fit around the two hexagon socket headed bolts. Then adjust the splitter so that the clearance between it and the blade to from 2 to 5mm and then tighten the two hexagon socket headed bolts. Then check again that the blade is securely tightened and remount the table insert and position the left side safety cover at its proper position. At this time be sure that the two orange safety covers and the anti-kick back pawls move smoothly.





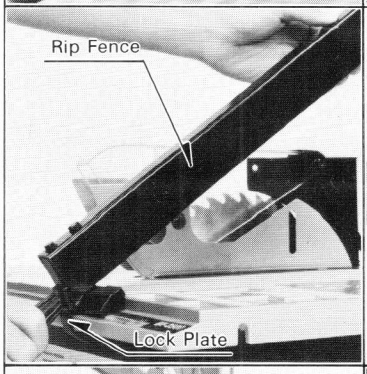
5) Mount the Rip Fence.

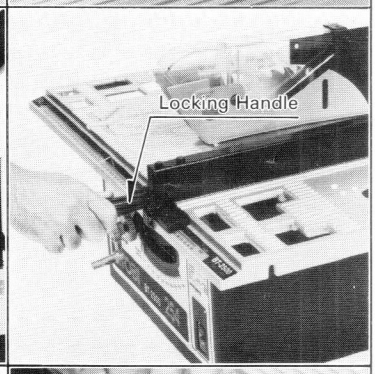
a. Mount the rip fence so that the side with the indicator is on the motor side. First fully loosen the locking handle and mount the front side so the lock plate contacts the front side of the table and then the back side so that the fence is level on the table. Be sure both locking plates are in contact with both the front and the back edges of the table.

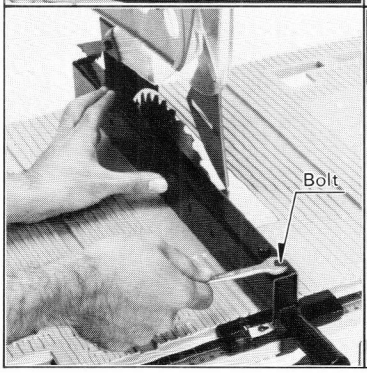
Adjustment of the Rip Fence

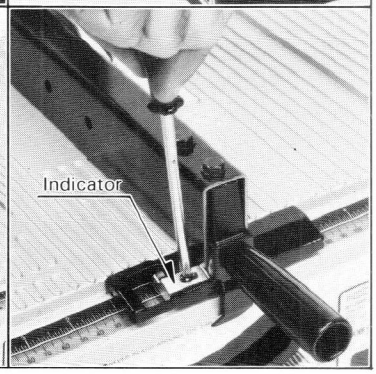
a. The rip fence has been adjusted at the factory to be at a 90° angle to the front side of the table. If it is not at a 90° angle loosen the two bolts at the top front side of the rip fence and adjust the rip fence angle so it is at a 90° angle.

b. Move the rip fence to contact the blade (The zero point) and then check that the rip fence position indicator is on 0. If it is not, loosen the screw and position the indicator on 0 and then fix the screw.









ADJUSTMENT OF THE BLADE

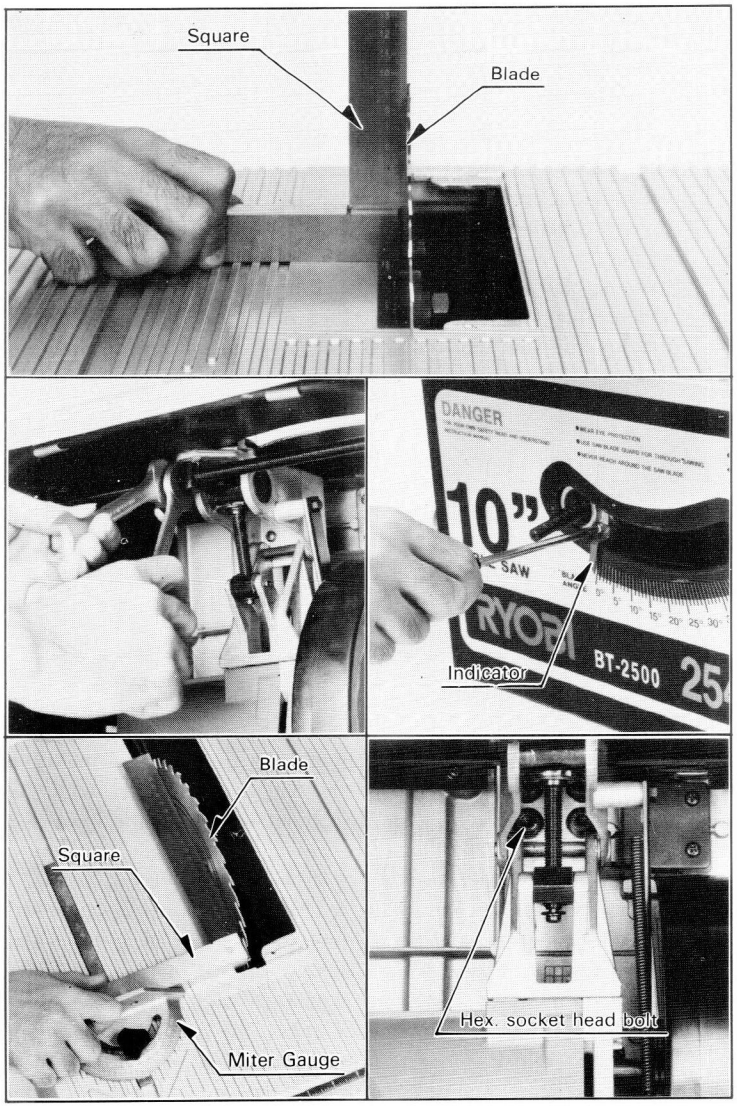
(Lay the table saw on its back.)

a. The blade has been adjusted at the factory. Using a square, check that the blade is at a 90° angle to the table.

b. Loosen the lock nut (by using two wrenches, one for the lock nut and one for the adjustment nut) on the left side of the tilting handle mechanism and move the adjustment nut so that the blade is at the 90° position. Then turn the lock nut (while holding the adjustment nut in position) to fix the adjustment nut.
Then loosening the indicator fixing screw set the indicator of the scale on the 90° marking and then tighten the fixing screw.

c. After the 90° of the blade has been adjusted turn the tilting handle to the 45° side and adjust the 45° angle by loosening the lock nut on the right side of the tilting handle mechanism while positioning the square against the blade turn the adjustment nut so that the blade is on the 45° position and then tighten the lock nut. Then loosening the indicator fixing screw, set the indicator of the scale on the 45° marking and then tighten the fixing screw.

d. Check that the blade is in alignment. First fully raise the blade. Then mark an "X" on one of the teeth which is set (Bent) to the left. Position the head of the combination square in the groove and adjust the blade of the square so that it just contacts the tip of the marked tooth. Move the square to the rear and rotate the blade to see if the marked tooth again contacts the blade of the square. If the tooth contacts the square the same amount at the front and the rear the saw blade is parallel to the miter gauge groove. If the blade is not parallel, loosen the four hex. socket head and bolts shift the motor unit to make the blade parallel and then retighten the bolts.



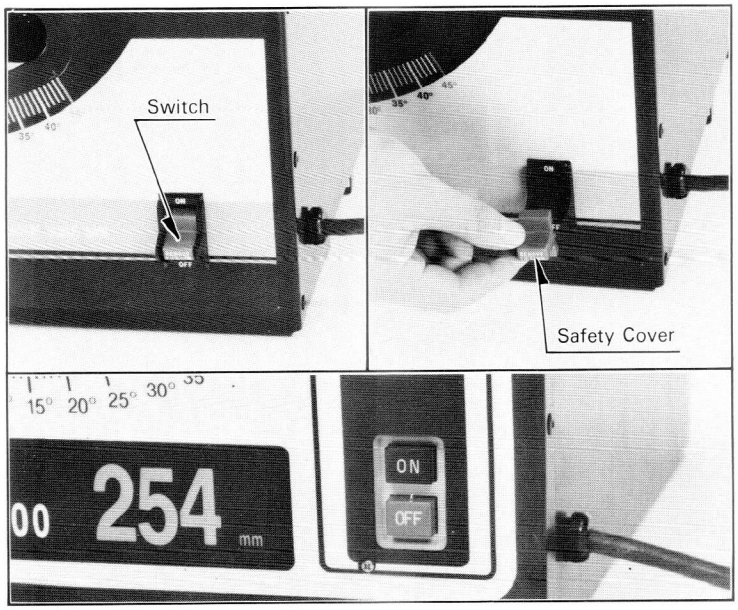
OPERATION

1) ON-OFF Switch.
CAUTION: Before turning on the switch ON make sure the blade guard is correctly installed and operating properly.

- The ON-OFF switch. (Safety type)
  This switch has a safety lock built in.
  To lock the switch in the OFF position pull out the safety cover over the switch To run the machine mount the safety cover over the switch.
- The ON-OFF switch. (Push button type)
  To start the machine push the on switch.
  To stop the machine push the off switch.

A. When turning the saw ON stand on either side of the blade and never in front of it and push the ON-OFF switch up.
After turning the switch ON, always allow the blade to come up to full speed before cutting.
Do not turn the switch ON and OFF repeatedly, as this may cause the blade to loosen. If the blade loosens stop the machine and after the blade stops rotating unplug the cord and retighten the lock nut. Never leave the saw while the power is ON.

B. To turn OFF the machine push the ON-OFF switch down. Never leave the machine until the cutting tool has come to a complete stop.

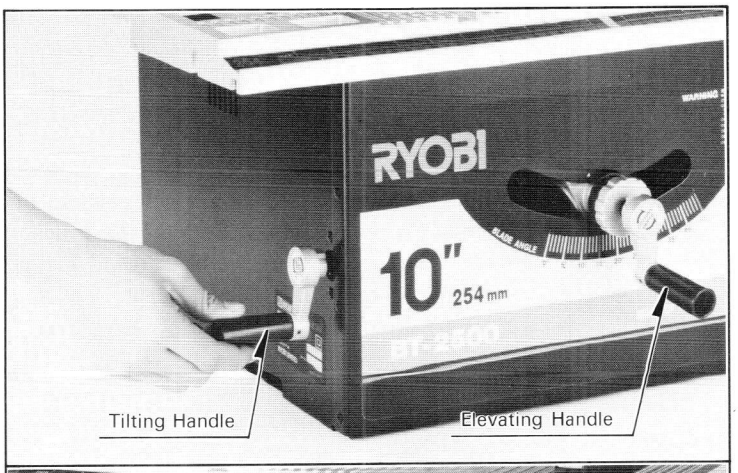


2) The Elevating Handle

A. The elevating handle is used to raise and lower the blade. Turn it clockwise to lower and counterclockwise to raise it.

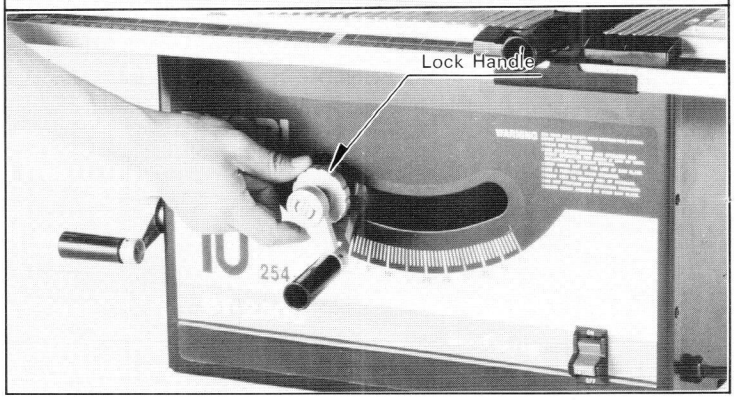
3) The Tilting Handle

A. The tilting handle is use to tilt the blade for bevel cutting. Turn it clockwise to tilt toward the left and counterclockwise to tilt toward the right.



4) The Lock Handle

A. This handle locks the blade in the desired tilt and elevated position. To loosen turn it counterclockwise. When setting the angle and the height of the cut fully loosen it. Before turning the table saw ON, be sure it is securely tightened so that the blade will not shift during the table saw operation.



5) The Splitter

This separates the saw kerf in a workpiece. This prevents possible binding and kickback.

The Anti-Kickback Pawls

These will grab the workpiece if kickback occurs. Be sure that the points are kept sharp.

6) Rip Fence

This fence is used for all ripping operations. Never rip freehand without the fence in place and securely locked.

7) Miter Gauge

The head is locked in the desired position for crosscutting or mitering by tightening the lock handle. Always lock it securely when in use.

BASIC TABLE SAW OPERATIONS

A. When crosscutting, miter cutting, bevel cutting, compound miter cutting and when rabbeting across the end of a narrow workpiece use the miter gauge.

B. Never make these cuts freehand (not using the miter gauge or other devices) because the blade could bind causing a kickback or causing your hand or fingers to contact the blade.

C. Always lock the miter gauge when in use.

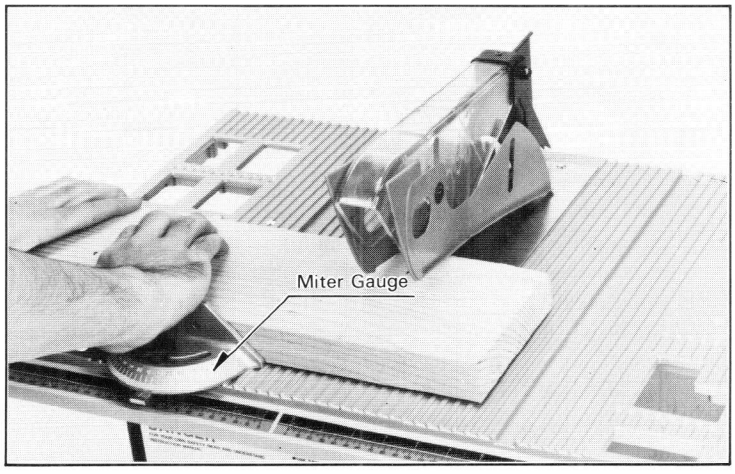
D. Remove the rip fence from the table.

E. Make sure the blade safety guard is mounted for all thru sawing operations (the blade cuts through the entire thickness of the workpiece. Remount the guard immediately after finishing dadoing, molding or rabbeting cuts.

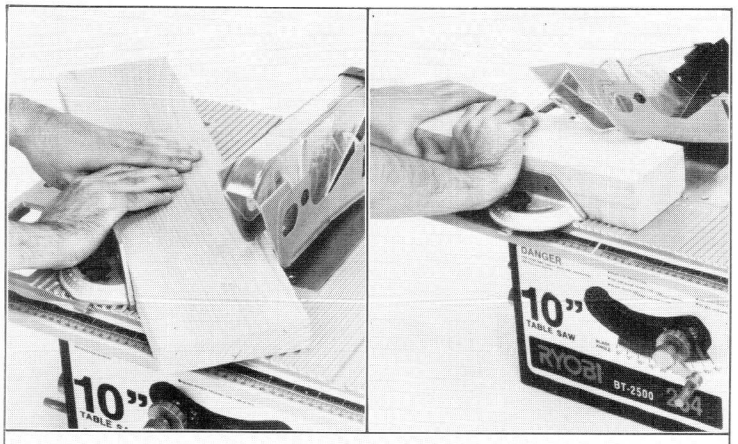
F. The blade should extend approximately 1/8 inch above the top of the workpiece.

1. CROSSCUTTING

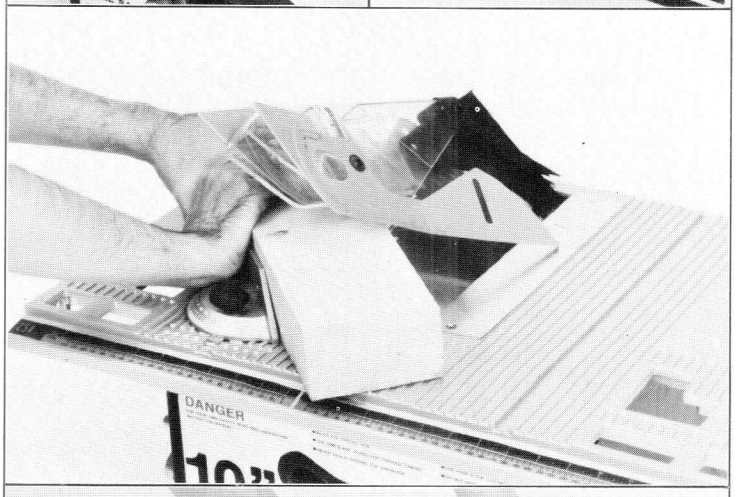
Crosscutting is cutting wood across the grain at 90° or square with both the edge and the flat side of the wood. This is done with the miter gauge set at "0". Before using it make sure it is locked. The miter gauge can be used on either of the grooves in the table.



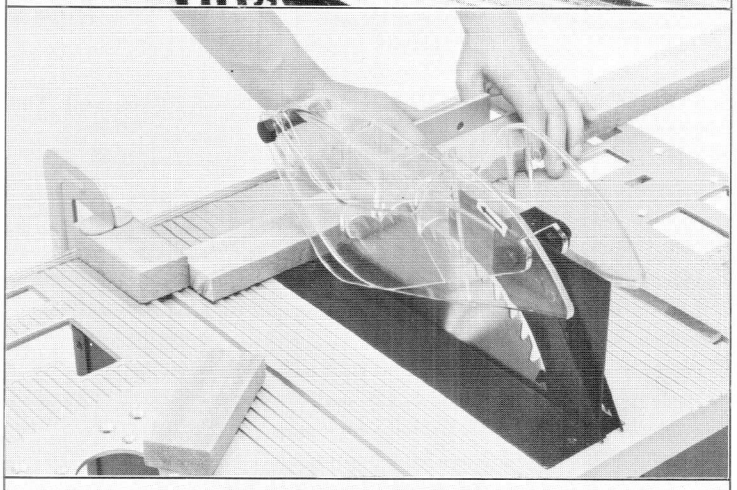
2. MITER CROSSCUTTING
   Miter crosscutting is cutting the wood at an angle other than 90° with the edge of the wood. Follow the same procedures as you would for crosscutting. Adjust the blade to the desired angle.
3. BEVEL CROSSCUTTING
   Bevel crosscutting is the same as crosscutting except that the wood is also cut at an angle other than the 90° with the flat side of the wood. Adjust the blade to the desired angle. Use the miter gauge in the groove to the right side of the blade so the blade guard will not interfere.

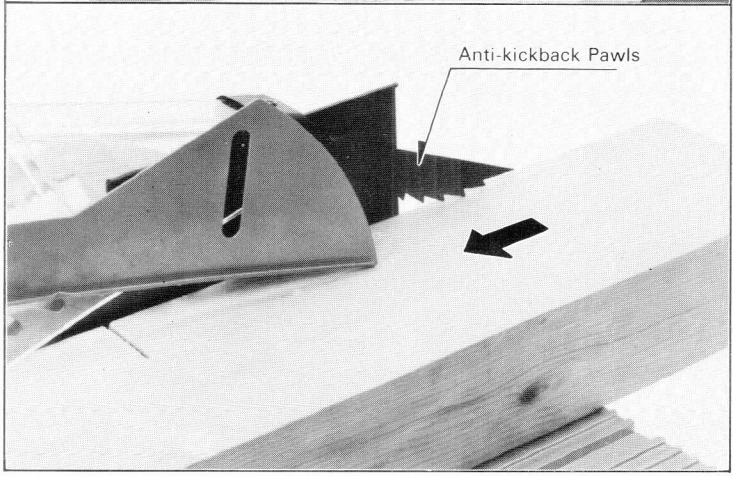


4. COMPOUND MITER CUTTING
   Compound miter cutting is a combination of miter cutting and bevel crosscutting. The cut is made at an angle other than 90° to both the edge and the flat side of the wood. Adjust the miter gauge and the blade to the desired angle and be sure that the miter gauge is locked.



5. REPETITIVE CUTTING
   Repetitive cross cutting is cutting a number of pieces the same length without having to measure each piece.
   DO NOT FEED workpiece "FREE HAND". Always use the miter gauge or other device to prevent rotation or twisting of workpiece during cutting.
   When making repetitive cuts from a long workpiece, make sure it is supported adequately along its length.
   NEVER USE THE RIP FENCE AS LENGTH STOP BECAUSE THE CUTOFF PIECE COULD BIND BETWEEN THE FENCE AND THE BLADE CAUSING A KICKBACK.
   When cutting several pieces to the same length, a STOP can be clamped to the edge of the table.
6. USING THE RIP FENCE
   Ripping, bevel ripping, resawing and rabbeting are done using the rip fence.





A. Always lock the rip fence securely when in use.
B. Remove the miter gauge from the table.
C. Make sure the blade guard is installed for all thrusawing type cuts. Remount the blade guard immediately after completion of resawing, rabbeting, dadoing and molding operations.
D. Frequently check the action of the anti-kickback pawls by passing the workpiece alongside of the spiltter while the saw is OFF. Pull the workpiece toward you to check that the pawls dig into the wood properly.
E. The blade should only extend 1/8 of an inch above the workpiece being cut. If more of the blade is exposed the danger of accidents will increase.
F. Do not stand directly infront of the blade because a kickback may occur. Stand on either side of the blade.

7. RIPPING

Ripping is cutting a piece of wood with the grain or lengthwise. This is done using the rip fence. Position the fence to the desired width of the rip and lock it in place.

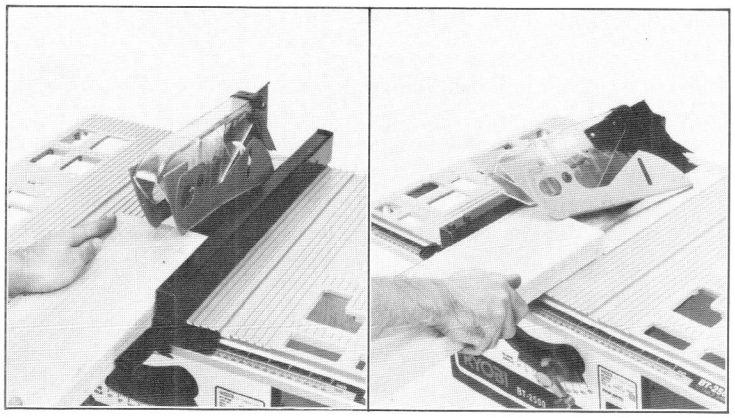
Before starting to rip be sure:

1. The rip fence is parallel to the saw blade.
2. The splitter is properly aligned with the saw blade.
3. The anti-kickback pawls are functioning properly.

When ripping long boards or large panels always use a work support. Hold the piece against the fence and feed it through the blade with a smooth, steady pressure.

When the ripping width is wider than 6 inches use your right hand to feed the workpiece until it is clear of the table.

Use your left hand only to guide, not feed the workpiece.

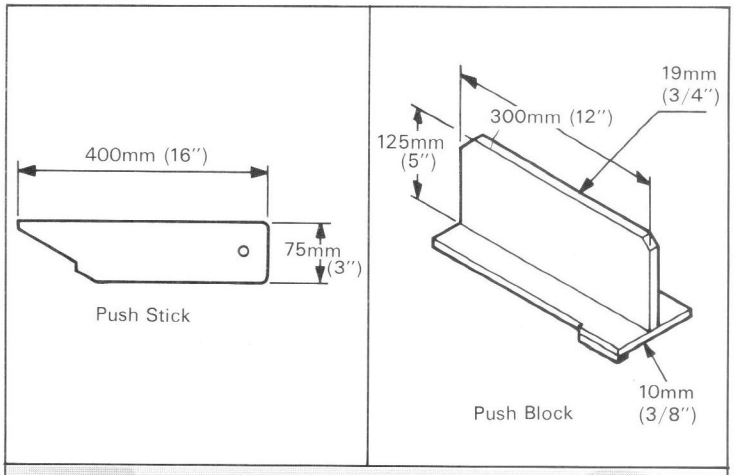


8. BEVEL RIPPING

When bevel ripping material 6 inches or narrower use the fence on the right side of the blade only. If the fence is mounted on the left side of the saw blade.

● WORK HELPERS

It is necessary to use certain "Work Helpers" like a push stick and push block, which you can make yourself, when cutting narrow and short work.



9. DADO CUT & MOLDING

A dado cut is a groove or through cut across the grain or in the same direction as the grain of the workpiece. It is usually used to fit one board into another like a shelf or corner joint.

Cross dado cuts are made in the same way as an ordinary cross cut except the blade safety guard is removed.

Rip dado cuts are made in the same way as a ripping operation except the guard is removed.

Never rip freehand without the fence set.

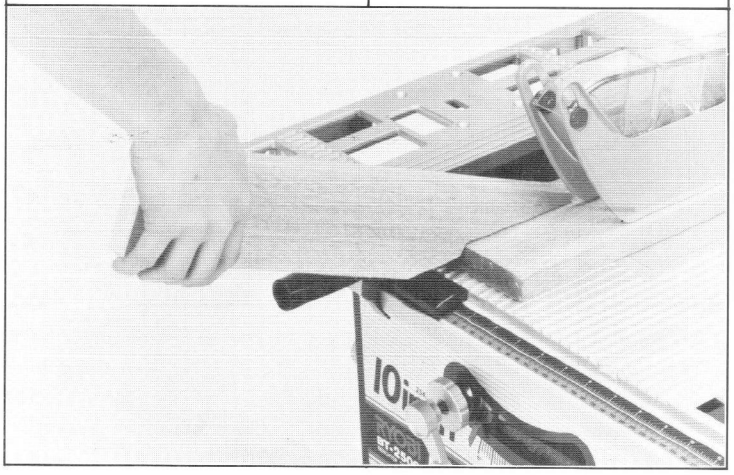
Never hold your hands over the blade when making groove cuts.

As the dado cut requires more power than ordinary crosscuts or ordinary ripping try not to remove all the stock in only one pass or you may overload the machine. This depends on the type of material being cut and the depth of the dado cut.

CAUTION:

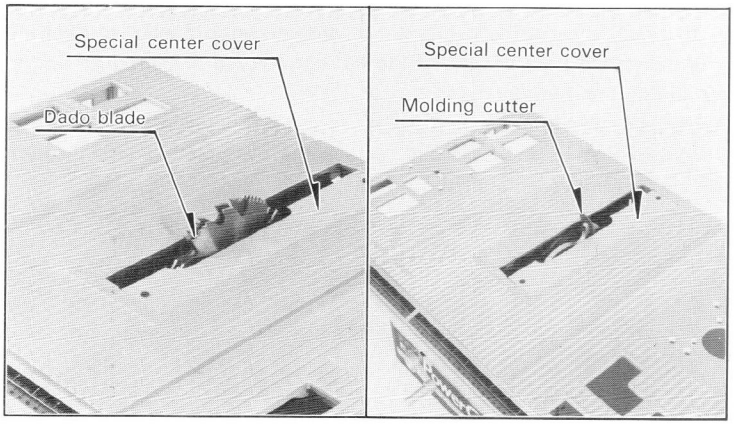
Use the optional special center cover when using the molding head or dado blade to assure safety.

When performing molding cuts, carefully adjust the height of the cutter head and knives so that the initial cut will be very light (between 1/8" and 1/4"). Use light, multiple cuts, (depending on the hardness of the wood, and the amount of stock to be removed) until the desired effect is achieved, the last cut should be very light (approximately 1/16").



10. RABBET CUT

Rabbet cuts can also be made using the dado head. A rabbet cut is a right angle step along the edge or end of a board. It is most commonly used as a glue joint.



■MOUNTING THE JIG SAW

(JS-60, JSE-60 models)

It will be easier to mount the jig saw if you tip the table saw on its back.

1. Position the inner jig saw fixing plate and fix it using the two phillips pan head fixing screws from under the table.
2. Insert the outer jig saw fixing plate in the jig saw base and mount the jig saw base on the inner fixing bracket. Then fix the outer fixing plate using the two phillips pan head screws, screwed in from under the table.
3. After mounting the jig saw, adjust the angle of the blade. Loosen the hexagon socket headed bolts that can be seen looking through the opening in the table and set the blade angle at the desired position. Then fix the bolt.

(HJ-50 model)

1. Mount the square plate around the blade angle adjustment opening.
2. Position the mounting plate and screw in the two inner side screws slightly (Enough to hold the plate in position).
3. Mount the jig saw so its base is under the fixing plate and screw in the two outer side screws. Fully tighten all four fixing scrwes.
4. Loosen the blade angle adjustment fixing screw on the back at set the blade at the angle desired. Then fully tighten the screw so that the angle of the blade will not shift during the operation.

■MOUNTING THE ROUTER (R-150, R-500)

It will be easier to mount the router if you tip the table saw on its back.

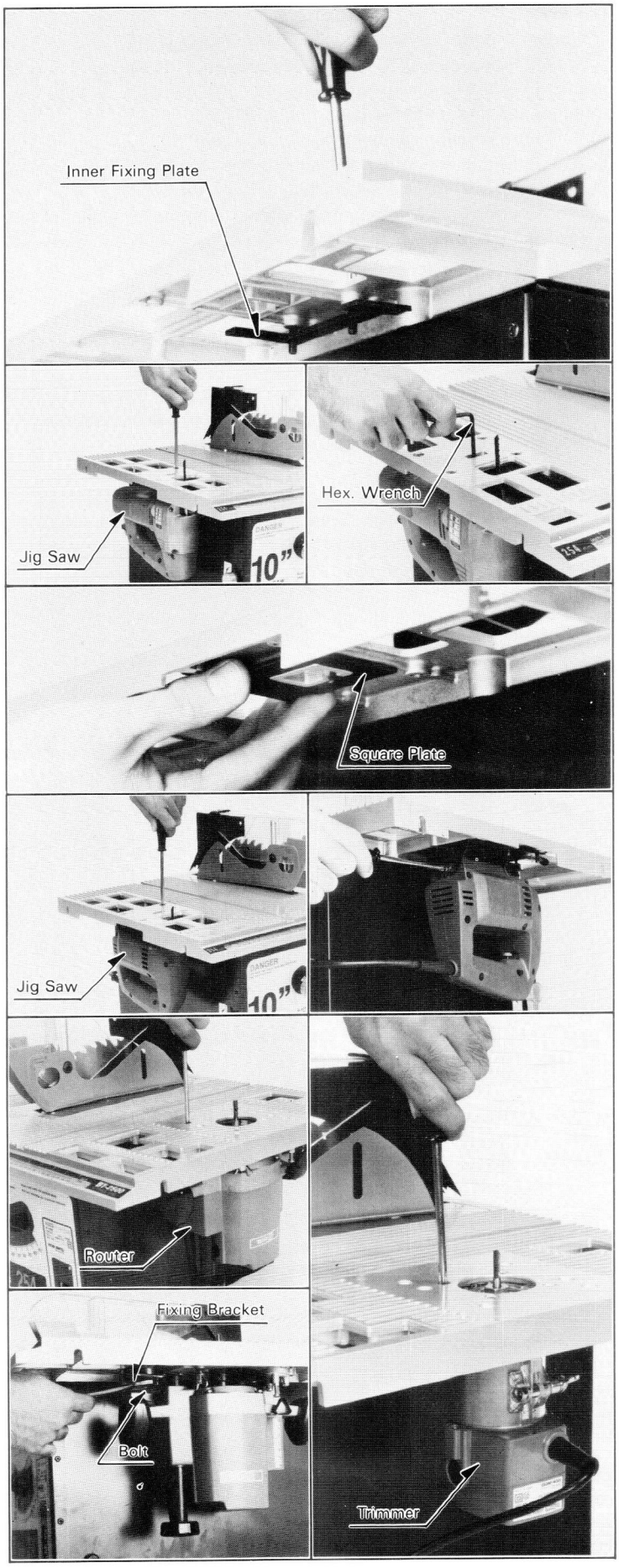
a. Position the router (so the depth guide can be seen from the side at its mounting position and screw in the two screws in from the top of the table using the two holes closest to the blade to fix it tempor - rarily.

b. Mount the two fixing brackets from under the table using the bolts to hold the router in position securely.

c. To adjust the cutting depth use a tape measure or ruler to measure the distance from the top of the table to the top of the cutter bit.

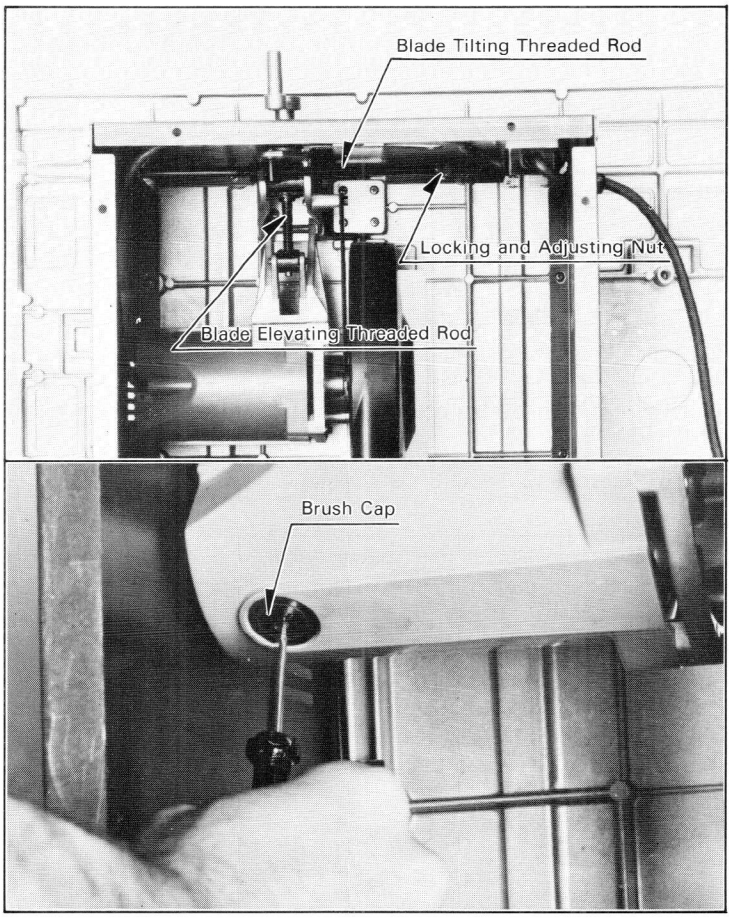
(Mounting the Trimmer)

a. Remove the trimmer unit from its base. Remove the four fixing screws that fix the base and remove the base plate. Using the four screws removed mount the trimmer.



■LUBRICATION

Lubricate the blade tilting threaded rod and both pairs of locking and adjustment nuts and the blade elevating threaded rod once a month using WD 40 or CRC 51 or any similar lubricant.



■MAINTENANCE

DO NOT MAKE ANY ADJUSTMENT WHILE THE MOTOR IS IN MOTION. ALWAYS REMOVE THE ELECTRIC CORD FROM THE LINE BEFORE CHANGING BRUSHES, LUBRICATING OR WHEN WORKING ON THE UNIT.

After use, check your tool to keep it in top condition.

- Clean out accumulated dust.
- When carbon brushes are worn to the standard line, they must be replaced.

■WARNING

To assure safety and reliability, all repairs with the exception of externally accessible brushes should be performed by AUTHORIZED SERVICE CENTER or other QUALIFIED SERVICE ORGANIZATIONS.

TROUBLE SHOOTING

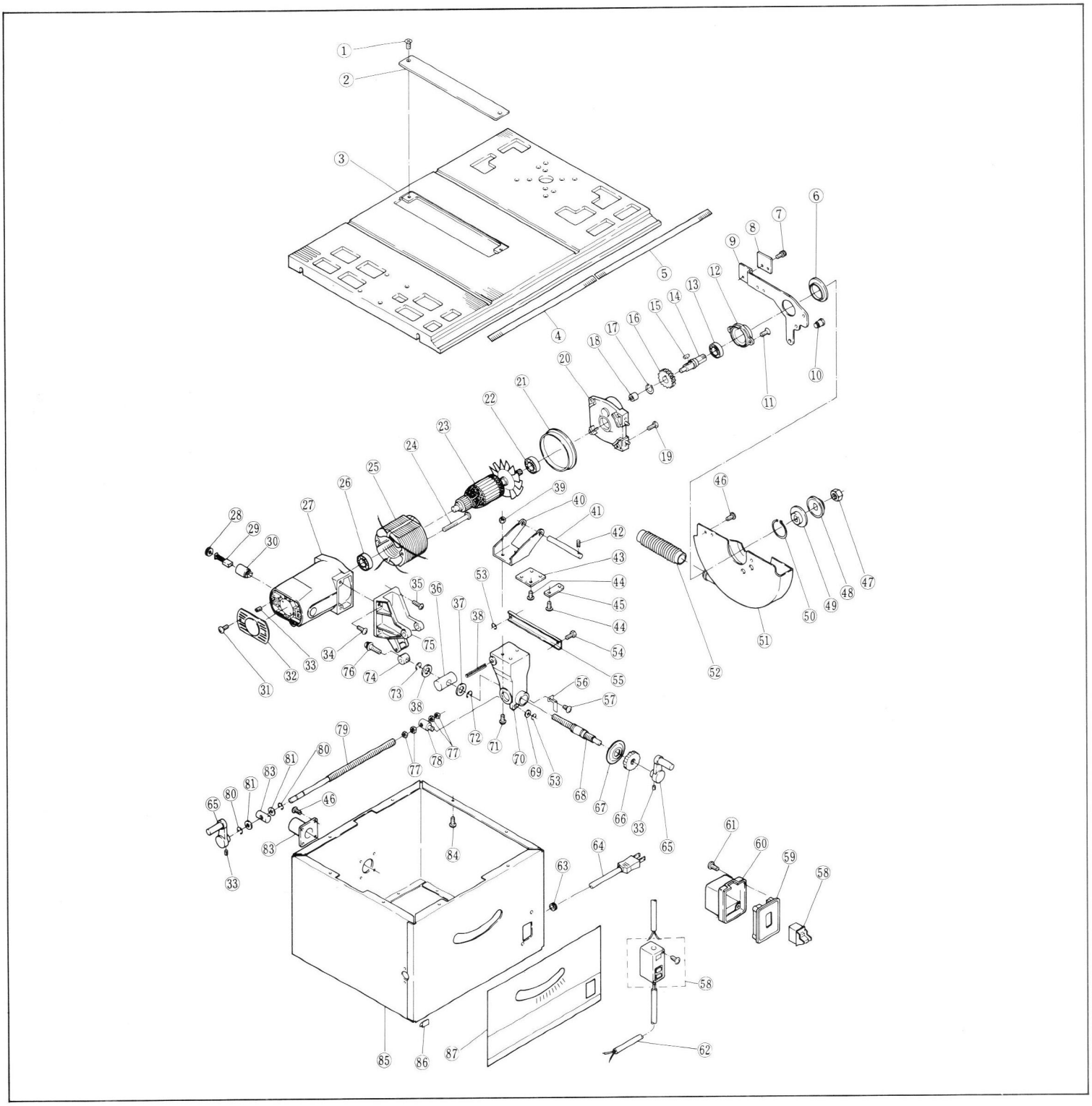
WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND ALWAYS REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE TROUBLE SHOOTING.

THE KEY TO ACCURATE RESULTS WITH A TABLE SAW IS PROPER ALIGNMENT AND ADJUSTMENT. IF YOUR MACHINE APPEARS TO BE CUTTING INACCURATELY, ITS ADJUSTMENTS AND ALIGNMENTS SHOULD BE CHECKED. NOTE ALSO THAT WHEN YOU CHANGE ONE ADJUSTMENT IT OFTEN AFFECTS ANOTHER . . . IT IS BEST TO CHECK ALL RELATED ADJUSTMENTS WHEN CORRECTING FOR A PROBLEM.

GENERAL

Problem	Probable Cause	Solution
1. Excessive vibration (blade wobble)	1. Blade out of balance	1. Remove and replace with a different blade.
2. Cutting stalls motor, burns work, binds, stops when ripping.	1. Dull blade or cutters.	1. Replace blade or sharpen.
	2. Blade is heeling	2. See adjustment section blade parallel
	3. Feed rate too fast.	3. Slow feed rate.
	4. Rip fence not parallel to blade (miter slot).	4. See adjustment section on rip fence.
	5. Splitter out of alignment.	5. See section guard assembly.
	6. Saw dust between lumber and guide fence.	6. Keep table top clean.
	7. Warped board.	7. Set hollow side facing down and feed feed the work slowly.
3. Workpiece has a tendency to walk away from fence when ripping.	1. Saw blade is not parallel with fence.	1. Make heel adjustment.
4. Machine does not cut accurately at 90° or 45° position.	1. Stop collars not properly adjusted.	1. See adjustment section on 90° & 45° tilt stop.
5. Elevating crank turns hard.	1. Sawdust packed on threads of elevating screw.	1. Clean threads by inserting icepick or sharp nail in threads while turning hand wheel. Oil with SAE #20 or #30 motor oil.
6. Motor develops full speed but blade stalls when cutting.	1. Blade loose.	1. Tighten blade.

■EXPLODED VIEW



TROUBLE SHOOTING MOTOR

GENERAL

Problem	Probable Cause	Solution
1. Motor fails to start.	1. Faulty switch.	1. Have unit checked by service technician.
	2. Winding in field or armature burned out.	2. Replace motor if necessary.
	3. No power at outlet caused by a circuit breaker open.	3. Install fuse or check breaker.
2. Motor will not reach full speed, fails to develop full power.	1. Low voltage.	1. Request voltage check from the power company.
	2. Circuit overloaded with lights, appliances and other motors.	2. Plug into different circuit without appliances or motors on same line.
	3. Windings burned out or open.	3. Have motor replaced.
	4. Extension cord too long.	4. Reduced length of cord.
3. Motor overheats, stalls, trips circuit breakers or fuses.	1. Motor overloaded.	1. Feed work slower into blade.
	2. Improper cooling due to excessive amount of sawdust accumulating around motor.	2. Clean out sawdust to provide normal air flow through motor.
	3. Windings burned out or open.	3. Have motor replaced.
	4. Fuses or circuit breakers do not have sufficient capacity.	4. Install proper size fuses or circuit breakers.

■PARTS LIST

Ref.No.	Description	Ref.No.	Description
1	Phil. Flat Screw M4×8	44	Tapping Screw (S) M5×10
2	Center Cover	45	Clamper (B)
3	Base	46	Tapping Screw (S) M4×8
4	Scale Label (A)	47	Hex. Nut M16
5	Scale Label (B)	48	Flange, Outside
6	Ring	49	Flange, Inside
7	Hex. Socket Head Bolt M6×12	50	Retaining Ring (C) S-40
8	Riving Knife Plate	51	Lower Guard
9	Riving Knife Arm	52	Dust Hose
10	Arm Pin	53	Retaining Ring (E) 4
11	Flat Tapping Screw (S) M5×12	54	Hex. Head Bolt M4
12	Gear Case Cover	55	Arm
13	Ball Bearing #6003ZZ	56	Angle Plate
14	Gear Shaft	58	Switch
15	Parallel Key	59	Switch Plate
16	Final Gear	60	Switch Box
17	Retaining Ring (C) S-16	61	Tapping Screw (B) M4×18
18	Oilless Metal	62	Aux. Cord
19	Tapping Screw (B) M5×30	63	Bushing
20	Gear Case Ass'y.	64	Cord Ass'y.
21	Fan Casing	65	Handle
22	Ball Bearing #6002ZZ	66	Lock Handle
23	Armature Ass'y.	67	Plate
24	Tapping Screw (B) M5×60	68	Elevating Shaft
25	Field Coil Ass'y.	69	Washer M6
26	Ball Bearing #6200ZZ	70	Locker Bracket
27	Motor Housing	71	Phil. Pan Screw M5×20
28	Brush Cap	72	Retaining Ring (E) BETW-12
29	Carbon Brush Set (2pcs/set)	73	Retaining Ring (E) 12
30	Brush Holder	74	Pivot Block (A)
31	Phil. Pan Screw M4×8	75	Motor Bracket Ass'y.
32	Tail Cover	76	Phil. Pan Screw M4×8
33	Set Screw M4×5	77	Hex. Nut M10
34	Tapping Screw (B) M5×18	78	Pivot Block (B)
35	Phil. Pan Screw M5×18	79	Inclining Shaft
36	Pivot Block (D)	80	Retaining Ring (E) 6
37	Washer	81	Washer
38	Spring Pin 8×63	82	Pivot Block (C)
39	Hex. Nut M5	83	Dust Nozzle
40	Locker Plate	84	Tapping Screw (S) M5×16
41	Shaft	85	Frame Ass'y.
42	Spring Pin 4×12	86	Cord Clip
43	Clamper (A)	87	Name Plate

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